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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) <div style="text-align: center;">20056-7002</div>	
	Application Number <div style="text-align: center;">10/765,437-Conf. #1536</div>	Filed <div style="text-align: center;">January 26, 2004</div>	
	First Named Inventor <div style="text-align: center;">Wade Spital</div>		
	Art Unit <div style="text-align: center;">3618</div>	Examiner <div style="text-align: center;">J. D. Walters</div>	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p><input type="checkbox"/> applicant /inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input type="checkbox"/> attorney or agent of record. Registration number _____</p> <p><input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. <u>33,466</u></p> </div> <div style="width: 35%; text-align: center;"> <p><u>/Michael E. Woods/</u> Signature</p> <p><u>Michael E. Woods</u> Typed or printed name</p> <p><u>(415) 388-0830</u> Telephone number</p> <p><u>June 12, 2006</u> Date</p> </div> </div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<input type="checkbox"/> *Total of <u>1</u> forms are submitted.			

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JUN 12 2006

Docket No.: 20056-7002
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Wade Spital

Application No.: 10/765,437

Confirmation No.: 1536

Filed: January 26, 2004

Art Unit: 3618

For: Foot-controlled motorized vehicle

Examiner: J. D. Walters

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Background: The application was rejected (FINAL) in a communication "FINAL" issued 10 March 2006, a post-final Amendment "AF AMEND" was submitted was filed 9 May 2006, and an Advisory Action "ADVISORY" mailed 30 May 2006. The ADVISORY indicated that the amendment would not be entered because the total claim count after amendment increased. However, the ADVISORY failed to discuss the undersigned's substantive remarks included in the AF AMEND regarding the rejections of the FINAL.

Issues: 1) Kamen fails as a 102 Reference, and 2) the 103 rejections inappropriately modify Kamen.

Kamen inappropriate as a 102 Reference: The rejection uses Kamen et al. (KAMEN) as the primary reference in the Section 102 and Section 103 rejections and therefore the undersigned focuses the comments primarily on the rejection's characterization of KAMEN and of the claims.

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At a first level of analysis, there are apparent similarities between KAMEN and claims 29–48 but upon further analysis these similarities disappear and the differences become extremely apparent and significant. One major feature of KAMEN important to this discussion is that KAMEN concerns itself with dynamic stability of statically unstable vehicle systems. The presently claimed invention addresses dynamic instability (e.g., the relative motion of the rider support to the underlying components) of a statically stable personal vehicular system, specifically to variably control both a forward speed and a backward (or aft) speed and to control both a starboard and port direction and variable turn rate in the forward and backward directions by pitching and/or rolling a rider platform relative to an underlying statically stable motive system.

For example, the rejection notes that KAMEN discusses (page 8, paragraph 93) that a rider may steer a KAMEN embodiment by leaning side to side. Here is what paragraph [0093] says:

[0093] In accordance with other embodiments of the present invention, leaning by user 12 may be used solely for governing fore-aft motion of vehicle 10, or, alternatively, leaning may be used solely for governing steering of the vehicle, or, for both functions.

The rejection misses one of the subtle points and equates a fore/aft or side/side lean by a user as an attitude change of a rider platform. This paragraph [0093] actually does not say this – it says that the KAMEN system responds to a user lean to control the device but given the teaching and context of the KAMEN invention, the undersigned believes that this is not a fair characterization. Claim 29 includes “a speed control coupling attaching said rider support to lower components of said vehicle and arranged to enable said rider support to tilt relative to said lower components ...” The rejection equates this coupling with a forceplate (e.g., paragraph [0061] – however this paragraph does not mention anything specific about the forceplate (particularly any tiltability) – e.g., such a forceplate could be implemented without tilting). Additionally, there is no evidence that the rider platform tilts relative to lower components. The rider platform in Kamen appears to

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the undersigned to be fixed to the drive components and any tilting of the rider platform is achieved by rotation of the platform about the wheel axels.

This language, coupled with other discussions throughout the KAMEN specification regarding pitch-control and inclination control teach that the rider platform tilts along with the drive system and is set by the feedback loop to provide a desired pitch angle when moving forward. The user leaning will be detected by a center of gravity shift and the feedback loop will set an appropriate fore/aft pitch. However, KAMEN does not expressly teach that the rider leaning actually tilts the rider platform relative to the drive system. A forward or backward lean of the user, if it shifts the center of gravity, may result in a fore/aft pitch change, as determined by the feedback loop. KAMEN does not teach relative pitching as it appears to the undersigned that the pitch of KAMEN's payload platform is a function of the platform's angular orientation about an axis of the drive system. In this case, the coupling is fixed and no changes are possible relative to the support.

35 USC Section 103(a): Claims 36 and 48 assertedly unpatentable over Kamen.

Claims 36 recite a pair of biasing springs, each constrained to deform "...when said rider support is tilted..." in a specified manner. First, the rider platform of KAMEN is not tiltable as thus the resultant responsive to the claimed tilting cannot be satisfied by KAMEN. Second, the rejection does not properly characterize the page 3, paragraph [0040] language relating to the "station keeping" mode or to the "kickstand" mode. The undersigned believes that KAMEN, like the embodiment of the present invention recited in claims 36 and 48, have provision for safety. However, the KAMEN system achieves this is a markedly different way than that recited in the claims and thus the undersigned respectfully asserts that claims 36 and 48 are not obvious in light of KAMEN.

KAMEN has a control loop for setting a fore/aft pitch of the rider platform. This control loop uses the propulsion system/motors/drive system to appropriate apply a

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desired torque to the dynamically stable system and set the desired fore/aft pitch in any given situation. This setting of a fore/aft pitch of a rider platform fixed to a drive axis is not biasing as understood to a person of ordinary skill in the art.

The rejection's assertion of motivation to use springs in lieu of the electro-mechanical control loop is respectfully asserted to be in error. Given the complexity of the control system and the fact that the KAMEN system is statically unstable with the control loop responding to center of gravity shifts and other operational parameters (e.g., speed), it would not occur to a person of ordinary skill in the art considering KAMEN to substitute mechanical springs for the control loop, should it even be possible to do so. The rejection does not explain how the other functions of the control loop will be satisfied in the event of such a substitution, therefore the motivation to modify as asserted does not meet the rejection's burden of establishing a prima facie case of obviousness.

Dated: June 12, 2006

Respectfully submitted,

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Application No. (if known): 10/765,437

Attorney Docket No.: 20056-7002

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on June 12, 2006
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/Michael E. Woods/

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